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BEFORE THE
Federal Communications Commission
WASHINGTON, DC 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Revision of the Commission's Rules to Ensure) CC Docket No. 94-102
Compatibility with Enhanced 911 Emergency)
Calling Systems)

COMMENTS OF AIRTOUCH COMMUNICATIONS, INC.

AirTouch Communications, Inc. ("AirTouch") hereby submits comments in response to the Commission's Public Notice of July 16, 1997 seeking comment on various *ex parte* presentations filed in the above-referenced proceeding.¹ AirTouch is a wireless communications company with significant interests in both cellular and broadband personal communications services and is therefore particularly well-suited to comment on the *ex parte* presentations that are the subject of the instant proceeding.

INTRODUCTION

The Commission released its *First Report and Order and Further Notice of Proposed Rulemaking* implementing wireless 911 and E911 requirements in July of 1996.² The rules adopted in that decision require cellular, broadband PCS and ESMR

¹ Public Notice, *Commission Seeks Additional Comment in Wireless Enhanced 911 Rulemaking Proceeding Regarding Ex Parte Presentations on Certain Technical Issues*, CC Docket No. 94-102, DA 97-1502 (released July 16, 1997).

² *Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems, First Report and Order and Further Notice of Proposed Rulemaking*, CC Docket No. 94-102, 3 Comm. Reg. (P&F) 967 (released July 26, 1996), 61 Fed. Reg. 40348 (1996) ("*E911 First Report and*

(“covered CMRS”) carriers by October 1, 1997 to process all wireless 911 — including all non-service initialized calls — to the designated Public Service Answering Point (“PSAP”) and, if requested by the administrator of the designated PSAP, 911 wireless calls which do not transmit a code identification.³ The rules further require CMRS licensees by April 1, 1998 to have the capability to ensure that a PSAP has call back capability.⁴ Since that time, numerous parties have petitioned for reconsideration of these rules and discussed the technical difficulties imposed by these rules in *ex parte* presentations to Commission staff. The *ex parte* presentations that are the subject of the July 16, 1997 Public Notice further illuminate the technical implications of these requirements.

AirTouch generally supports the analysis and policy objectives advocated in the *ex parte* presentations filed by GTE Service Corporation (“GTE”) and the Wireless E911 Coalition (“Coalition”).⁵ As discussed herein, the technical considerations discussed in the GTE/Coalition presentations further demonstrate that covered CMRS licensees’ obligations to pass the calls of non-service initialized users and non-code identified calls undermine carriers’ efforts to weed out fraud and unduly exposes carriers to liability for 911 calls not passed to PSAPs. In addition, contrary to the unsubstantiated

² (...continued)
Order”).

³ 47 C.F.R. § 20.18(b).

⁴ *Id.* § 20.18(d).

⁵ See Ex Parte Presentation of GTE Service Corporation in CC Docket No. 94-102, filed July 7, 1997 (“GTE Presentation”); Ex Parte Presentation of the Wireless E911 Coalition in CC Docket No. 94-102, filed July 10, 1997 (“Coalition Presentation”).

arguments set forth by the Ad Hoc Alliance ("Alliance"), CMRS providers are incapable of implementing PSAP call back through the use of "pseudo MIN."

DISCUSSION

I. EX PARTE PRESENTATIONS DEMONSTRATE THAT THE REQUIREMENT TO CARRY 911 CALLS FROM NON-SERVICE INITIALIZED USERS UNDULY EXPOSES CMRS LICENSEES TO FRAUD AND LIABILITY

The Commission inquired whether it was correct that "if only service initialized calls are routed to PSAPs, the calls must be validated for some technologies, e.g. AMPS and CDMA." The Coalition confirmed that, for CDMA, AMPS and TDMA,

Yes, only with validation is it possible to differentiate a service initialized mobile from a clone or a mobile whose service initialized subscription has lapsed. But the validation process is not split up to determine partial or full compliance. The validation process currently verifies the subscriber has a service agreement with the carrier or that the subscriber's home market has a roaming agreement in place with [the] visited system, as well as verifying the subscriber is credit worthy, is not a clone, and has not subscribed to any call origination prevention features.⁶

Whether covered CMRS licensees should be required to carry the 911 calls of non-service initialized users is a subject that has been thoroughly discussed in pending petitions for reconsideration of the *E911 First Report and Order*. The Commission originally proposed to require covered CMRS providers to pass the 911 calls of "service initialized" handsets only.⁷ Carriers evaluated the so-called "Consensus Agree-

⁶ Coalition Presentation at 12.

⁷ *Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems, Notice of Proposed Rule Making*, 9 FCC Rcd. 6170, 6177 (1994) ("E911 Notice").

ment” under the justifiable assumption that only the transmission of 911 calls from service-initialized users remained under consideration.⁸ Indeed, the record in the instant proceeding relating to the technical aspects of call back capability was premised on this assumption.⁹

The GTE/Coalition presentations illuminate the important technical issues raised by the Commission’s departure from the Consensus Agreement.¹⁰ As discussed in those presentations, a number of codes are programmed into a handset and transmitted to a cell site or switch. A handset manufacturer programs a default MIN, which is later modified by NANP-compliant 10-digit MIN programmed by a retail center and/or carrier.¹¹ In addition, a unique valid NANP number (or, in a GSM environment, a MSISDN) is necessary to use for call back by a PSAP. Thus, the existence of a mere “code identification” in a handset does not necessarily provide a PSAP with call back

⁸ Public Notice, *Commission Seeks Additional Comment In Wireless Enhanced 911 Rulemaking Proceeding Regarding “Consensus Agreement” Between Wireless Industry Representatives and Public Safety Groups*, CC Docket No. 94-102, DA 96-198 (released Feb. 16, 1996).

⁹ See CTIA-NENA Consensus Agreement, Ex Parte Filing in CC Docket No. 94-102, filed February 13, 1996, Attachment at 5 (agreeing with *E911 Notice* requirement that 911 obligations apply to “service initialized” handsets, citing *E911 Notice*, 9 FCC Rcd. at 6177); see also *E911 Notice*, 9 FCC Rcd. at 6179 (requesting comment on whether a PSAP “sees the call as originating from a mobile radio *subscriber*” and whether the “*subscriber’s* billing number” must be transmitted to the PSAP to provide call back capability) (emphasis added).

¹⁰ Section 20.18 of the Commission’s rules as adopted, provides that covered CMRS licensees “must process all 911 calls which transmit a Code Identification and must process all 911 wireless calls which do not transmit a Code Identification where requested by the administrator of the designated Public Safety Answering Point.” 47 C.F.R. § 20.18(b).

¹¹ Coalition Presentation at 3-6 (responses to questions 2-5); GTE Presentation, Attachment at 1-2 (responses to questions 2-5).

capability. GTE and the Coalition discuss these technical realities thoroughly and accurately, so AirTouch will not repeat them here. The Coalition presentation also addresses the *more fundamental problems* associated with requiring CMRS licensees to bypass all validation procedures and pass 911 calls from non-service initialized users.¹² The technical considerations discussed in the Coalition presentation demonstrate that this requirement should be eliminated and, by inference, that PSAPs should not have the discretion to require that CMRS licensees pass such 911 calls.

In requiring CMRS licensees to pass 911 calls from non-service initialized users, the Commission cited generally to “significant public interest benefits to making it easier for individuals to place wireless 911 calls in emergencies,” and summarily discounted parties’ expressed concern for the impact of fraudulent and non service-initialized calls on carriers’ networks and PSAPs’ abilities to promptly act to protect public safety.¹³ The GTE/Coalition presentations demonstrate that the technical issues raised by the Commission’s rules cannot be so readily dismissed. Indeed, AirTouch has experienced first-hand the technical realities discussed in the Coalition presentation. The Coalition describes the situation in which a subscriber no longer has service but has a mobile handset with a 10-digit MIN, but when the phone number is reassigned to another subscriber the terminated subscriber may actually receive the PSAP’s call back.¹⁴ In fact, AirTouch is aware of instances in which this has occurred on its network, with the result that the service initialized customer’s service was adversely impacted. To exacerbate the

¹² *E911 First Report and Order*, 3 Comm. Reg. at 978-982 ¶¶ 29-42.

¹³ *Id.* at 980 ¶ 38.

¹⁴ Coalition Presentation at 15.

problem, in one AirTouch market companies have marketed “911-only” mobile handsets that, by virtue of the requirement that carriers pass even non-service initialized users’ 911 calls, provide ostensibly “free” 911 service to non-subscribers.

In addition to overburdening carriers’ and PSAPs’ service capabilities, such calls expose AirTouch and other carriers to a considerable risk of liability.¹⁵ As these calls are carried over AirTouch’s network — notwithstanding the absence of a carrier-subscriber relationship — there is still a danger that AirTouch will be held liable for non-service initialized users’ calls that are not passed to the PSAP. The Commission concluded in the *E911 First Report and Order* that carriers “may attempt to bind *customers* to contractual language” to protect themselves from liability for negligence.¹⁶ This is not an option in the situations described above, however, because there is no privity between the carrier and the non-service initialized user. The technical issues discussed in the GTE/Coalition presentations, and AirTouch’s own experience with those issues, at a minimum support limiting carriers’ liability for non-subscriber and non-code identified calls which are not passed to a PSAP.

II. CALL BACK CAPABILITY IS NOT TECHNICALLY FEASIBLE FOR ALL CALLS THROUGH THE USE OF “PSEUDO-MIN”

Section 20.18(d) of the Commission’s rules requires covered CMRS licensees to provide by April 1, 1998 “the telephone number of the originator of a 911 call and the location of a cell site or base station receiving a 911 call” so PSAPs have the

¹⁵ See *id.* at 2.

¹⁶ *E911 First Report and Order*, 3 Comm. Reg. at 996 ¶ 99.

opportunity to call back the 911 caller in the event of a disconnection.¹⁷ GTE and the Coalition document that covered CMRS providers cannot comply with this Rule; under existing mobile switch technologies, it is not technically possible to transmit a 911 caller's mobile telephone number if the caller does not have a customer relationship with the carrier — either directly (as a subscriber) or indirectly (as a roamer) — and, as a result, does not have a telephone number to relay.¹⁸ Importantly, as the Coalition aptly notes, “[o]nly when a fully validated subscriber is *service initialized* and registered on the serving network can the phase I requirements of subscriber information and call-back number be fully met by all technologies.”¹⁹

In contrast, the Alliance claims — without explanation — that it is a “trivial exercise” for covered CMRS providers to come into compliance with the requirement that they relay the caller's number through the use of a “pseudo MIN.”²⁰ However, the Alliance does not explain just how CMRS providers are to relay the caller's number using a “pseudo MIN.”

The Alliance assumes that CMRS providers can simply apply to E911 calls a capability they currently utilize in supporting roaming — issuance of a “Tempo-

¹⁷ 47 C.F.R. § 20.18(d). Although the Commission took this rule from the Consensus Agreement, that Agreement was predicated on the fact that CMRS providers would support E911 access only for service initialized handsets — that is, where ANI information is available.

¹⁸ Ex Parte Presentation of the Ad Hoc Alliance for Public Access to 911 in CC Docket No. 94-102, filed July 11, 1997 (“Alliance Presentation”).

¹⁹ Coalition Presentation at 1 (emphasis added).

²⁰ See Alliance Presentation at 2-3. Completely inaccurate is the Alliance's assertion that “[t]here has been no challenge to the Alliance's engineering statements regarding the availability or use of pseudo MINs for this purpose.” *Id.*

rary Local Directory Number” (“TLDN”). The Alliance is mistaken. In the first place, TLDNs are assigned in roaming for incoming calls, *not* outgoing calls like 911 calls. Second, TLDNs are not assigned by the “cell switch” as the Alliance claims;²¹ rather, they are assigned (on incoming call attempts) by the Visiting Location Register (“VLR”) as part of the validation process. However, non-roaming calls (like 911 calls) never reach a VLR. Indeed, the Commission has held that CMRS licensees may not even attempt to validate 911 calls originated by non-subscriber/non-roamer handset users.²² Finally, only if a user is a valid subscriber (*i.e.*, a service initialized user) is a TLDN assigned to that user. Indeed, a mobile unit is unable to recognize a TLDN transmitted from a PSAP. Thus, even if a TLDN could be assigned to a 911 call, there is no assurance that the TLDN given the PSAP will identify the handset of the calling party so the PSAP can call back.

It is thus apparent that deploying a call back system for non-subscriber/non-roamer 911 calls using TLDNs is technically infeasible.²³ Furthermore, implementation of a TLDN-based call back system would hardly be a “trivial exercise”

²¹ See *id.* at 2 (“[A] temporary MIN can be assigned by the cell switch to any handset based on its ESN.”).

²² See *E911 First Report and Order*, 3 Comm. Reg. at 979 ¶ 33.

²³ This would, moreover, be a direction contrary to that which the CMRS industry has been taking since its inception. The Commission is fully familiar with the fraud problems the CMRS industry has experienced. The industry has spent billions of dollars to make their networks more secure. The technical issues discussed in the GTE/Coalition presentations underscore the likely outcome of the Alliance’s proposal — that licensees would spend additional (but unknown) dollars to make their network *less* secure and *more* susceptible to fraud.

as the Alliance asserts.²⁴ The *E911 First Report and Order* does not contain any cost-benefit analysis of providing call back capabilities to E911 callers who are either non-subscribers or non-roamers. The costs of implementing such a capability certainly will be large. In contrast, the public interest benefits are undocumented and questionable.

In short, the Coalition presentation underscores that the fundamental problem with the Commission's Phase I E911 rule is the requirement that covered CMRS carriers support E911 access for non-subscribers and non-roamers.²⁵ Indeed, the technical issues raised in the Coalition presentation constitute additional support for the Commission's original proposal, endorsed by the Consensus Agreement, to limit E911 access to the overwhelming majority of consumers: subscribers and roamers.

²⁴ Alliance Presentation at 2.

²⁵ Coalition Presentation at 1.

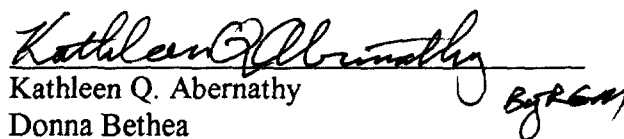
CONCLUSION

For the reasons discussed herein, the Ex Parte presentations demonstrate that the requirement to carry 911 calls from non-service initialized users unduly exposes CMRS licensees to fraud and liability. In addition, the Commission should reject the Alliance's "pseudo MIN" proposal and acknowledge that current technologies do not allow for PSAP call back to non-service initialized users.

Respectfully submitted,

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